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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,567	09/16/2003	Margaret May-Som Wu	CJB-0303	2983
7590	08/02/2005		EXAMINER	
ExxonMobil Research and Engineering Company			LEE, RIP A	
P.O. Box 900				
Annandale, NJ 08801-0900			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,567

Applicant(s)

WU ET AL

Examiner

Rip A. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action follows a response filed on May 23, 2005. Applicants have amended claims 1 and 10. New claim 14 was added. Claims 1-9 remain for prosecution.

Election/Restrictions

1. Applicant's election with traverse of group I, claims 1-9, in the reply filed on May 23, 2005 is acknowledged. The traversal is on the ground that all claims are restricted to an ethylene-alpha olefin copolymer and thus belong to the same class. This is not found persuasive because of the reasons set forth in the previous office action. Specifically, the invention of group I and group II are not related inventions by necessity. As such, the requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102 / 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Wu *et al.* (U.S. 6,660,894) for the same reasons set forth in the previous office action.
4. Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu *et al.* in view of Heilman *et al.* (U.S. 6,124,513) for the same reasons set forth in the previous office action.

Response to Arguments

5. Applicants traverse the rejection of claims over Wu *et al.*, indicating that the patent does not teach isomerization in the substantial absence of molecular hydrogen. It appears that Applicants submit that the working examples do not teach such a step, and this is only because the oligomerization product passes through the hydrogenation catalyst first, followed by the isomerization catalyst. Apparently, the presence of hydrogen does not affect isomerization, and thus, the hydrogen is not removed *via* another outlet.

The instant claims are drawn to a related process, but the isomerization is carried out prior to hydrogenation. This particular manipulation is also an embodiment well within the teachings of Wu *et al.* (discussion, column 5). Proceeding further, it can be seen that Wu *et al.* teaches an oligomerization step carried out in the substantial absence of hydrogen (col. 5, lines 1-12).

“The oligomerization product can also be isomerized and selectively/minorly cracked by contacting the oligomerization produce with a second solid material (isomerization catalyst) comprising, consisting of, or consisting essentially of an aluminosilicate ZSM-5 zeolite to thereby produce isomerization and selective/minor cracking of at least a portion of the oligomerization product under a condition effective to cause isomerization and selective/minor cracking to occur. Reaction conditions for isomerization and selective/minor cracking of the oligomerization product can include a temperature in the range of from about 190 °C to about 240 °C; more preferably from about 200 °C to about 235 °C; and most preferably from about 210 °C to about 230 °C.”

Note that hydrogen is not required, as would be expected in an isomerization reaction. This is in sharp contrast to the description of the hydrogenation step where, as the name implies, hydrogen is required (col. 4, lines 52-67).

“The oligomerization product can be hydrogenated by contacting the oligomerization product with a first solid material (hydrogenation catalyst) comprising, consisting of, or consisting essentially of a porous carrier material and a group VIII metal component to thereby produce hydrogenation of at least a portion of the oligomerization product under a condition effective to cause hydrogenation to occur. Reaction conditions for hydrogenation of the oligomerization product can include hydrogen pressure in the range of from 0 to about 2000 psi; more preferably from about 50 to about 1500 psi, and most preferably from 150 to 1000 psi.”

A reference is considered for all that it teaches, and thus, it is not limited to the working examples. It is evident that Wu *et al.*, indeed, teaches isomerization in the substantial absence of hydrogen, and therefore, Wu *et al.* teaches the subject matter of the instant claims. In light of this and previous discussions, the rejection of record has not been withdrawn.

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6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

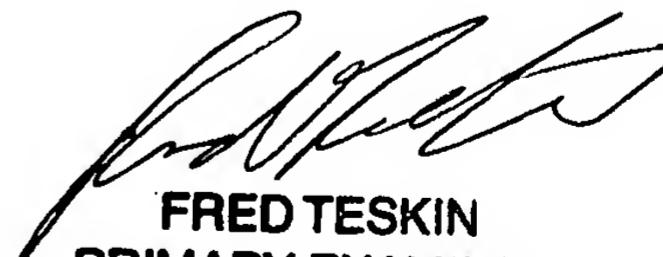
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

ral

July 27, 2005


FRED TESKIN
PRIMARY EXAMINER
1713